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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,719	03/22/2004	Carmen Flosbach	FA1170USNA	9219
23906	7590	10/24/2006	EXAMINER	
E I DU PONT DE NEMOURS AND COMPANY LEGAL PATENT RECORDS CENTER BARLEY MILL PLAZA 25/1128 4417 LANCASTER PIKE WILMINGTON, DE 19805			MCCLELLAND, KIMBERLY KEIL	
			ART UNIT	PAPER NUMBER
			1734	
DATE MAILED: 10/24/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/805,719

Applicant(s)

FLOSBACH ET AL.

Examiner

Kimberly K. McClelland

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of: / \
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 9-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not disclose removing the foil from the transparent coating such that the entire transparent coating together with the image remains on the substrate. Applicant claims that by not disclosing a portion of the transparent layer is transferred, then the current application must show transferring the entire transparent layer. Applicant also points to page 11, lines 1-3 and page 12, lines 4-7 to demonstrate the entire transparent layer is transferred, but these passages do not explain how the entire transparent coating is transferred. Furthermore, a lack of disclosure to the transferring of a portion of the transparent coating is not a positive recitation of the current claim language.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 9-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. In claim 9, the phrase "the transparent coating" is unclear. It is unclear which transparent coating is being referred to. Applicant is encouraged to use language that distinguishes the transparent coatings. For the purposes of examination, examiner has assumed "the transparent coating" may refer to either the first transparent coating or the optional transparent coating.

6. In claim 12, the phrase "the curable coating" is unclear and lacks antecedent basis. It is unclear which transparent coating is being referred to. For the purposes of examination, examiner has assumed "the curable coating" refers to the first transparent coating.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,527,898 to Nakamura in view of in view of U.S. Patent No. 6,486,903 to Wagner.

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9. With respect to claim 1, Nakamura discloses a method of using a transfer sheet, including a) providing a substrate (7) to be provided with an image (3) covered with a first transparent (column 8, lines 12-13) coating layer (2) and providing a backing foil consisting of a foil (1), one side having a first uncured or at most partially cured transparent coating (2), optionally (column 9, lines 53-55), a further transparent coating (4) and, on the side of the first coating remote from the foil, having an image thereon (3), wherein the image is applied by printing (column 9, lines 4-5); b) applying the backing foil with its coated side provided with the image onto the substrate (See Figures 1-3); c) curing of at least the first transparent coating (column 10, lines 31-33); and d) removing the foil from the first transparent coating such that the entire transparent coating, together with the image, remains on the substrate, wherein curing according to process step c) proceeds before and/or after removal of the foil (column 10, lines 24-26).

10. Nakamura discloses that the pattern layer may be provided by printing (column 9, lines 4-5). Although they do not specifically disclose that the printing is accomplished by way of ink-jet printing, it would have been obvious to one of ordinary skill in the art at the time of invention to utilize such a printing method in the invention of Nakamura motivated by the fact that Wagner, also drawn to a process for the production and use of a transfer film comprising a carrier (backing); a radiation curable coating on the carrier; and an image disposed on the transparent coating (abstract; Figures 1-6; column 4, lines 23-42), disclose that the printing of the image may be accomplished by any known method including ink-jet (column 6, lines 50-55).

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11. As to claim 10, Nakamura discloses the first transparent coating is thermally curable and curing proceeds in step c) by supply of thermal energy by means of a method selected from the group consisting of radiant heating, convection, induction heating, contact heating and any desired combination thereof (column 10, lines 16-25).

12. As to claim 11, Nakamura discloses the first transparent coating is curable by means of high-energy radiation and the curing in step c) proceeds by irradiation with high-energy radiation selected from the group consisting of electron beam radiation and UV radiation (column 10, lines 34-35).

13. As to claim 12, Nakamura discloses the curable coating composition is a coating composition curable thermally and by means of high-energy radiation and the curing in step c) proceeds by supply of thermal energy by means of a method selected from the group consisting of radiant heating, convection, induction heating, contact heating and any combination thereof and by irradiation with high-energy radiation selected from the group consisting of electron beam radiation and UV radiation (column 8, lines 52-56; column 10, lines 34-37).

14. As to claim 13, Nakamura discloses the transparent coating layer of step a) comprises a coating selected from the group consisting of thermally curable coatings, coatings curable by means of high-energy radiation and coatings which are curable by means of high-energy radiation and additionally by thermal means (column 10, lines 31-37).

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15. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,527,898 to Nakamura in view of in view of U.S. Patent No. 6,486,903 to Wagner as applied to claims 9-13 above, and further in view of U.S. Patent Application Publication No. 2004/0028881 to Yoshihara et al.

16. With respect to claim 14, Nakamura discloses the use of a radiation-curable protective layer but are silent as to the inclusion of an inorganic filler, in an amount relative to the resin solids content.

17. Nonetheless, it would have been obvious to one of ordinary skill in the art at the time of invention to utilize an inorganic filler in the radiation-curable transparent protective resin of Nakamura motivated by the fact that Yoshihara et al., also drawn to methods for forming a radiation-curable transparent protective layer (See abstract), discloses that the inclusion of an inorganic filler at about 20 wt% of the resin solids content (See paragraph 0077). The motivation would have been to enhance hardness of the protective layer (See paragraph 0005).

18. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,527,898 to Nakamura in view of in view of U.S. Patent No. 6,486,903 to Wagner and of U.S. Patent Application Publication No. 2004/0028881 to Yoshihara et al. as applied to claim 14 above, and further in view of U.S. Patent No. 6,245,382 to Shvartsman et al.

19. With respect to claim 15, Nakamura does not disclose the optional transparent coating contains 1 to 20 wt.%, relative to the resin solids content, of an inorganic filler.

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20. Shvartsman, also drawn to methods for the protection of images utilizing a transferable radiation-curable transparent protective layer, disclose the inclusion of more than one layer of protective coating displays a substantial improvement in protection from solvents, plasticizers, and U.V. radiation (abstract; column 21, line 66 to column 22, line 21). It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the second transferable radiation-curable protective layer as taught by Shvartsman for the optional adhesive coating in Nakamura. It would have been obvious to one of ordinary skill in the art at the time of invention to provide the method resulting from the references as combined in sections (15-17), above, with two layers of radiation-curable transparent having the same resin solids composition of 1 to 20 wt.%, relative to the resin solids content, of an inorganic filler.

21. As to claim 16, Nakamura does not disclose transparent coating layer of step a) and said optional further transparent coating layer of step a) have the same resin solids composition.

22. Shvartsman, also drawn to methods for the protection of images utilizing a transferable radiation-curable transparent protective layer, disclose the inclusion of more than one layer of protective coating displays a substantial improvement in protection from solvents, plasticizers, and U.V. radiation (abstract; column 21, line 66 to column 22, line 21). It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the second transferable radiation-curable protective layer as taught by Shvartsman for the optional adhesive coating in

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Nakamura. It would have been obvious to one of ordinary skill in the art at the time of invention to provide two layers of radiation-curable transparent having the same resin solids composition.

Response to Arguments

23. Applicant's arguments, see page 6, lines 21-32, filed August 28th, 2006, with respect to the rejection(s) of claim(s) 1 and 4-12 under 35 U.S.C. 103 (a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly discovered prior art.

24. Applicant's arguments with respect to claims 9-16 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly K. McClelland whose telephone number is (571) 272-2372. The examiner can normally be reached on 8:00 a.m.-5 p.m. Mon-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris A. Fiorilla can be reached on (571)272-1187. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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SUPERVISORY PATENT EXAMINER
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